

# 1st Question

```
In [37]: a=[]
print('Enter 6 elements: ')
for i in range(6):
    b=int(input())
    a.append(b)
print(a)
```

```
Enter 6 elements:
32
41
0
55
68
82
[32, 41, 0, 55, 68, 82]
```

```
In [38]: print(len(a)) # a)Total no of items in the list
```

```
6
```

```
In [39]: print(a[3]) # b)Fourth item in the list
```

```
55
```

```
In [40]: print(a[-3:]) # c)Last three items in the list
```

```
[55, 68, 82]
```

```
In [41]: print(a[2:]) # d)All the items in the list except first two values
```

```
[0, 55, 68, 82]
```

```
In [42]: print(a[::-1]) # e)list in reverse order
```

```
[82, 68, 55, 0, 41, 32]
```

```
In [43]: print(min(a),max(a)) # f)largest and smallest values in list
```

```
0 82
```

```
In [44]: print(sum(a)) # g)sum of all values in list
```

```
278
```

```
In [45]: if 0 in a:
    print('Index of value 0 is: ',end=' ') # h)
    for i in range(len(a)):
        if(a[i]==0):
            print(i)
            break
    else:
        print('There are no zero in the list')
```

```
Index of value 0 is: 2
```

```
In [46]: a.sort() # i)Sorting of list
print(a)
```

```
[0, 32, 41, 55, 68, 82]
```

```
In [47]: a.pop(0) # j)Deleting first item from the list
print(a)
```

```
[32, 41, 55, 68, 82]
```

```
In [48]: a[-2]=9876 # k)changing the last second item of the list
print(a)
```

```
[32, 41, 55, 9876, 82]
```

```
In [49]: a.append(-500) # l)Appending a value to the list
print(a)
```

```
[32, 41, 55, 9876, 82, -500]
```

## 2nd Question

```
In [61]: x=[]
y=int(input('Enter the no of elements :'))
for i in range(y):
    c=int(input())
    x.append(c)
print('The smallest value in the list is: ',end=' ')
print(min(x))
for i in range(y):
    if x[i]==min(x):
        print('The index of smallest value is: ',end=' ')
        print(i)
        break
```

Enter the no of elements :7

1

876

46

0

35

36

6

The smallest value in the list is: 0

The index of smallest value is: 3

## 3rd Question

```
In [55]: p=[]
m=input('Enter a string of lower case letters: ')
for i in range(97,123):
    p.append(m.count(chr(i))) # program for counting the no of times each letter appears
print(p)
```

Enter a string of lower case letters: this program is written for python assignment

[2, 0, 0, 0, 2, 1, 2, 2, 4, 0, 0, 0, 2, 4, 3, 2, 0, 4, 4, 5, 0, 0, 1, 0, 1, 0]

## 4th Question

```
In [56]: dict={'abc':7,'def':11,'ghi':13,'jkl':17,'mno':19} # a) Printing the value of key 'def'
k=dict['def']
print(k)
```

11

```
In [57]: print(dict.keys()) # b) using keys() method to print all keys
```

```
dict_keys(['abc', 'def', 'ghi', 'jkl', 'mno'])
```

```
In [58]: for key,value in dict.items(): # c) Printing all the keys associated with their values  
print(key,':',value)
```

```
abc : 7  
def : 11  
ghi : 13  
jkl : 17  
mno : 19
```

```
In [59]: if 'pqr' in dict.keys(): # d)checking if the dictionary contains  
print('key pqr contains in the dictionary')  
else:  
print('key pqr does not contain n the dictionary')
```

```
key pqr does not contain n the dictionary
```

```
In [60]: dict['abc']=23 # e) changing the value of key "abc" and printing all the values  
print(dict.values())
```

```
dict_values([23, 11, 13, 17, 19])
```